

Procurement Language

Multifunction Devices

The Vendor Must:

- **Provide multifunction device models that meet the ENERGY STAR guidelines for energy efficiency.** ENERGY STAR-compliant multifunction device models shall conserve energy by powering down when not in use. For ENERGY STAR guidelines, see the tables below.
- **Ship medium-speed and high-speed standard-sized multifunction devices with a duplexing capability that is set at the default mode.** While the automatic duplex mode is optional on ENERGY STAR compliant multifunction devices, EPA recommends that users try this feature on their new multifunction devices. By making more double-sided copies, consumers can decrease paper consumption, save money, and help prevent air pollution.
- **Ship multifunction devices with the power management features enabled.** The vendor shall ship multifunction device models with the default time for the low-power mode set at 15 minutes and the sleep mode set to the levels specified in the tables below.

So that equipment performance can be compared, include the following in upcoming contracts:

- **Provide data on the time it takes for a multifunction device to warm-up from the sleep mode or low-power mode.** A low-power or sleep mode with a quick recovery time will reduce the time a user must wait for the multifunction device to begin functioning. In addition to the sleep and low-power features, a vendor may include a weekly timer (an internal device that turns a multifunction device on and off at predetermined times) on the multifunction device, as long as the timer does not impede the normal operations of the sleep feature.
- **Provide comparisons of double-sided and single-sided imaging speeds.** Some mid- or high-volume multifunction devices have duplexing speeds equal to the single-sided imaging speed. However, some are much slower and may affect the productivity of a multifunction device.
- **Provide information on the type of recycled paper recommended for the multifunction device model.** Organizations can help to reduce the flow of solid waste into landfills by using recycled paper in their multifunction devices. The federal government is purchasing paper with a minimum of 30 percent post-consumer content.
- **Provide information on the average time between failure, and the average time between service.** Multifunction devices that jam frequently create unnecessary waste. Asking about the double-sided imaging jamming rate will provide additional information on the performance of multifunction devices. Manufacturers may refer consumers to independent lab reports on the performance and reliability (including duplexing information, if available) of specific multifunction device models.

- **Provide instruction on equipment operation and maintenance including information on ENERGY STAR features.** If office equipment is to perform to the full extent of its capability, users need to be educated to ensure that the equipment is properly operated and maintained. Any education and training provided by the vendor must include information on all energy saving features of each multifunction device, including energy-efficiency modes and their operation, duplexing operations and double-sided default programming. Vendors might also use this opportunity to explain the environmental and economic benefits of these features, as well as suggestions for reducing use, such as using electronic mail to reduce the number of copies generated, and the extent to which any supplies or packaging may be returned to the vendor for recycling or remanufacturing. Ideally, this instruction will be provided by vendor-trained and certified personnel.

For state and local governments making blanket purchases, include the provision that the vendors will:

- **Deliver new, repaired, and/or refurbished machines configured properly to meet the most current ENERGY STAR specifications.**
- **Provide customer support with respect to power management features such that these features remain properly enabled.**

Lease and maintenance agreements for office equipment shall include the following provisions concerning power management features:

- **Installation and service performed as part of the agreement shall include the proper configuration of power management features according to the terms of the ENERGY STAR Program MOU current for that class of equipment, at the time of the service.** Personnel involved in system integration and service shall treat the malfunction of power management features as functional failures of the equipment, and shall diagnose and repair these problems rather than disabling the power management features.
- **If vendor representatives perform site customization and user training, these services shall be carried out so as to maximize the energy efficiency of the installed product.** Vendor staff shall state the facts that power management features promote long equipment life, save energy and reduce the introduction of heat and fumes into the workplace.
- **If duplex imaging is available as a default, this should be enabled and site training should include information to facilitate default duplexing as a workplace standard.**

**Criteria for ENERGY STAR-Compliant
Standard-Sized Multifunction Devices --Tier 2 (April 1, 1999)**

Multifunction Device Speed (images per minute)	Low-power Mode (Watts)	Recovery Time 30 seconds	Sleep Mode (Watts)	Sleep Mode Default Time	Automatic Duplex Mode
$0 < \text{ipm} \leq 10$	NA	NA	≤ 25	$\leq 15 \text{ min}$	No
$10 < \text{ipm} \leq 20$	NA	NA	≤ 70	$\leq 30 \text{ min}$	No
$20 < \text{ipm} \leq 44$	$3.85 \times \text{ipm} + 50$	Yes	≤ 80	$\leq 60 \text{ min}$	Optional
$44 < \text{ipm} \leq 100$	$3.85 \times \text{ipm} + 50$	Recommended	≤ 95	$\leq 90 \text{ min}$	Optional
$100 < \text{ipm}$	$3.85 \times \text{ipm} + 50$	Recommended	≤ 105	$\leq 120 \text{ min}$	Optional

**Criteria for ENERGY STAR-Compliant
Large Format Multifunction Devices -- Tier 2 (April 1, 1999)**

Multifunction Device Speed (images per minute)	Low-power Mode (Watts)	Recovery Time 30 seconds	Sleep Mode (Watts)	Sleep Mode Default Time	Automatic Duplex Mode
$0 < \text{ipm} \leq 40$	NA	NA	≤ 70	$\leq 30 \text{ min}$	No
$40 < \text{ipm}$	$4.85 \times \text{ipm} + 50$	Recommended	≤ 105	$\leq 90 \text{ min}$	No

**Criteria for ENERGY STAR-Compliant
Upgradeable Digital Copiers --Tier 2 (April 1, 1999)**

Upgradeable Digital Copier Speed (images per minute)	Low-power Mode (Watts)	Recovery Time 30 Seconds	Sleep Mode ¹ (Watts)	Sleep Mode Default Time
$0 < \text{ipm} \leq 10$	NA	NA	≤ 5	$\leq 15 \text{ minutes}$
$10 < \text{ipm} \leq 20$	NA	NA	≤ 5	$\leq 30 \text{ minutes}$
$20 < \text{ipm} \leq 44$	$3.85 \times \text{ipm} + 5$	Yes	≤ 15	$\leq 60 \text{ minutes}$
$44 < \text{ipm} \leq 100$	$3.85 \times \text{ipm} + 5$	Recommended	≤ 20	$\leq 90 \text{ minutes}$
$100 < \text{ipm}$	$3.85 \times \text{ipm} + 5$	Recommended	≤ 20	$\leq 120 \text{ minutes}$

¹ For upgradeable digital copiers that consist of functionally integrated units such as print, scan, and computer components, sleep mode Watts for the total system may be increased by an amount equal to the sleep mode Watts allowed for an ENERGY STAR-compliant computer.

**Criteria for ENERGY STAR-Compliant Large
Format Upgradeable Digital Copiers -- Tier 2 (April 1, 1999)**

Upgradeable Digital Copier Speed (images per minute)	Low-power Mode (Watts)	Recovery Time 30 Seconds	Sleep Mode ¹ (Watts)	Sleep Mode Default Time
$0 < \text{ipm} \leq 40$	NA	NA	≤ 65	$\leq 30 \text{ minutes}$
$40 < \text{ipm}$	$4.85 \times \text{ipm} + 45$	NA	≤ 100	$\leq 90 \text{ minutes}$

¹ For upgradeable digital copiers that consist of functionally integrated units such as print, scan, and computer components, sleep mode Watts for the total system may be increased by an amount equal to the sleep mode Watts allowed for an ENERGY STAR-compliant computer.